

Release notes for ENDF/B Development std-092_U_238
evaluation

ENDF
B-VII.dev

November 1, 2016

- **checkr** Warnings:

1. The standards sublibrary uses NSUB=19, but this was never officially adopted by CSEWG for the ENDF format.
MAT=9237, MF= 1, MT=451 (0): Stds. NSUB

```
ERROR(S) FOUND IN MAT=9237, MF= 1, MT=451
INVALID SUBLIBRARY NUMBER NSUB =    19          RECORD NUMBER    4
```

2. The standards sublibrary is not meant for transport calculations and is not required to be complete.
MAT=9237, MF= 3, MT=451 (0): Incompleteness

```
ERROR(S) FOUND IN MAT=9237, MF= 3, MT=451
LRP = 0 Requires the presence of File 2, but it is missing.
```

- **fizcon** Warnings:

1. The standards sublibrary is not meant for transport calculations and is not required to be complete.
MAT=9237, MF=33, MT= 18 (1): Incompleteness

```
ERROR(S) FOUND IN MAT=9237, MF=33, MT= 18
ENERGY INCORRECT                      SEQUENCE NUMBER    1
  EXPECT 1.00000E-05, FIND 5.00000E+05
ENERGY INCORRECT                      SEQUENCE NUMBER    1
  EXPECT 1.00000E-05, FIND 5.00000E+05
```

- **fudge-4.0** Warnings:

1. Indicates a test was skipped due to missing information
reactionSuite: (Error # 0): Test skipped

```
WARNING: Skipped test Wick's limit: "Channel 'n + U238' could not be found!"
```

2. The standards sublibrary is not meant for transport calculations and is not required to be complete.
reaction label 0: n[multiplicity:'unknown'] [total fission] / Cross section: (Error # 0): Incompleteness

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1.e6 eV!
```

3. The standards sublibrary is not meant for transport calculations and is not required to be complete.
reaction label 0: n[multiplicity:'unknown'] [total fission] / Product: n (Error # 0): Incompleteness

```
WARNING: Missing distribution (required for all 'n' products)!
```

4. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 0 (n[multiplicity:'unknown'] [total fission]): / Form 'eval': / Component 1 (Error # 0): Condition num.

```
WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small
```